

## ABSTRACT OF THE DISCLOSURE

The present invention relates to an apparatus and a method for vector descriptor representation and multimedia data retrieval, which can quantize a plurality of feature values described by a vector descriptor respectively, represent the quantized feature values in the form of bit or orthogonally transform the quantized vector feature values, and rearrange the feature values represented in the form of bit from the highest bit to the lowest bit or rearrange the transformed coefficient from low frequency to high frequency to represent the vector descriptor hierarchically. Moreover, when retrieving multimedia data, the present invention can code in variable length and store the rearranged feature values and the number of feature values which are input, inversely code only the feature values corresponding to the number of the feature values of the stored feature values, inversely arrange the inversely coded feature values to be restored to original feature values, inversely quantize the restored feature values, and compare the feature values restored by the inverse quantization with the feature values stored in a multimedia database to retrieve multimedia data.